

## AMENDMENTS TO THE SPECIFICATION

Please delete the duplicate copy of page 25 included in the application as filed.

Please amend the brief description of Fig. 1 by replacing the paragraph on page 17, lines 4-27 with the following amended paragraph (note that underlining in the first line of the paragraph is present the original version):

Figure 1. Production of anti-NGF transgenic mice. (A) DNA constructs for the production of the transgenic mice: light chain (upper panel) and heavy chain (lower panel) transgenes. CK and CH1-CH3, human constant region domains of light (K) and heavy ( $\gamma$ 1) chains; VK and VH, light and heavy chain variable regions of the  $\alpha$ D11 monoclonal antibody; CMV, cytomegalovirus promoter. (B) Crossing mice to generate mice expressing the functional anti-NGF antibody. VK- $\alpha$ D11 x VH- $\alpha$ D11 (VK: line of mice expressing the light chain of  $\alpha$ D11 antibody; VH: line of mice expressing the heavy chain of  $\alpha$ D11 antibody) (C) PCR analysis to detect the presence of VK (upper panel) and VH (lower panel) transgenes. The gels show 12 littermates born from homozygous VK (upper panel) or VH (lower panel) mice crossed to negative mice, to verify homozygosity of the single transgenic lines. As evident, all littermates carry the transgene. (D) Dot blot analysis of the four lines of mice expressing the heavy or the light chain. The upper panel was probed with a human heavy chain constant region probe and the lower panel with a human light chain constant region probe (see Methods). DNA samples in the upper panel: duplicates of VH- $\alpha$ D11 #D, wild type (WT, negative control) and VH- $\alpha$ D11 #C, single sample of human placental DNA (H.PI.DNA, positive control). DNA samples in the lower panel: duplicate of VK- $\alpha$ D11 #A, single samples of

VK- $\alpha$ D11#B, WT (negative control), and Human placental DNA (positive control). (E) Levels of VH- $\alpha$ D11 (left panel) and VK- $\alpha$ D11 (right panel) mRNA in heart at P1 and P90 of mice from family #1, evaluated by phosphorimaging analysis, normalized to the  $\beta$ -actin mRNA (mean counts  $\pm$  SEM). (F) Levels of mRNA for the VH- $\alpha$ D11 chain (left panel) and the VK- $\alpha$ D11 chain (right panel) in heart at P1 and P90 of mice from family 1, evaluated by phosphorimaging analysis, normalized to the  $\beta$ -actin mRNA (mean counts  $\pm$  SEM). Number of mice for each age, n = 6.

Please amend the brief description of Fig. 16 by replacing the paragraph on page 20, line 25 to page 21, line 2 with the following amended paragraph (note that underlining in the first line of the paragraph is present the original version):

Figure 16 Time progression of neuron labelling by anti-MAP2 antibodies  
MAP-2 abnormal distribution in anti-NGF mice. At 2 (A), 6 (C) and ~~(B)~~ and 15 (E) months of age anti-MAP-2 (Sigma, St. Louis, MO, USA) labels the full length of cortical dendrites in control mice. In anti-NGF mice, a reduction of the number of labeled-dendrites and a re-distribution of the staining is observed. The decrease in staining starts at 2 months of age (B) and proceeds with aging (D, F: 6 and 15 months of age, respectively). Scale bar = 100  $\mu$ m.

Please replace the paragraph on page 43, lines 1-5, with the following amended paragraph:

Rapid Sequencing of ssDNA phages. The plaques that showed a strong and positive reaction on nitrocellulose filter were sequenced. SsDNA templates were prepared as described<sup>8</sup> and resuspended in 10  $\mu$ l

of H<sub>2</sub>O<sub>2</sub>. R156 (5' AACCATATATTCGGTCGCTGAGGC3') [SEQ ID NO: 1]  
has been used as primer oligonucleotide for phage sequencing.

Please insert the following new paragraph after page 51 of the specification:

All publications, patents, and patent applications cited in this specification are herein incorporated by reference as if each individual publication or patent application were specifically and individually indicated to be incorporated by reference.